

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application.

1. (Currently Amended) A method of producing a transformed plant having a characteristic selected from (i) improved ~~rooting efficiency and/or prolonged vase life~~ propagation efficiency of scions, (ii) improved propagation efficiency and rooting efficiency of scions, and (iii) improved propagation efficiency of scions and prolonged vase life of cut flowers, relative to a plant that is not transformed, the method comprising:

(a) transforming a plant material with a heterologous DNA encoding a protein that binds to a stress-responsive element under the control of a stress-responsive promoter; ~~and~~

(b) ~~expressing the DNA in the transformed plant, producing regenerants from the transformed plant material; and~~

(c) subject said regenerants to a selection for said characteristic, such that a plant having said characteristic is obtained,

wherein:

- (i) the stress-responsive promoter is ~~selected from the group consisting of rd29A gene promoter, rd29B gene promoter, rd17 gene promoter, rd22 gene promoter, DREB1A gene promoter, cor6.6 gene promoter, cor15a gene promoter, erd1 gene promoter, and kin1 gene promoter; and~~
- (ii) the DNA is ~~selected from the group consisting of DREB1A, DREB1B, DREB1C, DREB1D, DREB1E, DREB1F, DREB2A, DREB2B, DREB2C, DREB2D, DREB2E, DREB2F, DREB2G, and DREB2H.~~

2.-3. (Cancelled)

4. (Currently Amended) The method of producing a transformed plant of claim 1, wherein the DNA is selected from the group consisting of:

(a) a DNA consisting of the nucleotide sequence represented by that is selected from the group consisting of SEQ ID NO: 1 NOs: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25 and 27;

(b) a DNA comprising a nucleotide sequence that is at least 94% homologous with the nucleotide sequence represented by that is selected from the group consisting of SEQ ID NO: 1 NOs: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25 and 27, wherein the protein encoded by homologous DNA is

capable of binding to a stress-responsive element and regulating the transcription of a gene located downstream of the element; and

(c) a DNA encoding a protein consisting of the amino acid sequence represented by selected ~~from the group consisting of SEQ ID NO: 2, NOs: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, and 28.~~

5. (Cancelled)

6. (Currently Amended) A transformed plant having a characteristic selected from (i) improved rooting efficiency and/or prolonged vase life propagation efficiency of scions, (ii) improved propagation efficiency and rooting efficiency of scions, and (iii) improved propagation efficiency of scions and prolonged vase life of cut flowers, relative to a plant that is not transformed, wherein the transformed plant is produced by the method according to claim 1.

7.-8. (Cancelled)

9. (Currently Amended) The transformed plant of claim 6, wherein the DNA is selected from the group consisting of:

(a) a DNA consisting of the nucleotide sequence represented by that is selected from the ~~group consisting of SEQ ID NO: 1 NOs: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25 and 27;~~

(b) a DNA comprising a nucleotide sequence that is at least 94% homologous with the nucleotide sequence represented by that is selected from the group consisting of SEQ ID NO: 1 NOs: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25 and 27, wherein the protein encoded by homologous DNA is capable of binding to a stress-responsive element and regulating the transcription of a gene located downstream of the element; and

(c) a DNA encoding a protein consisting of the amino acid sequence represented by selected ~~from the group consisting of SEQ ID NO: 2, NOs: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, and 28.~~

10. (Cancelled)

11. (Withdrawn) A method for rooting a plant that is capable of adventitious propagation, comprising:

(i) providing a cutting from said plant that expresses a heterologous DNA encoding a

protein that binds to a stress-responsive element, and then

(ii) exposing said cutting to conditions conducive to rooting, whereby said cutting develops roots with an efficiency that is greater than a cutting from a non-transformed plant.

12. (Withdrawn) A transformed ornamental plant, comprising a heterologous DNA encoding a protein that binds to a stress-responsive element under the control of a stress-responsive promoter, such that a cutting from said plant has a prolonged vase life relative to a cutting from a non-transformed plant.

13. (Withdrawn) The ornamental plant of claim 1, wherein the ornamental plant is selected from the group consisting of lilies, orchids, chrysanthemums, roses, carnations, petunias, baby's breath, and cyclamens.

14. (Previously Presented) The method of claim 1, wherein the DNA is transformed into the plant by using a vector selected from the group consisting of a virus, a Ti plasmid of *Agrobacterium* and an Ri plasmid of *Agrobacterium*.

15. (Previously Presented) The method of claim 1, wherein the DNA is transformed into the plant by electroporation, polyethylene glycol-mediated transformation, particle gun transformation, microinjection, silicon nitride whisker-mediated transformation, or silicon carbide whisker-mediated transformation.